

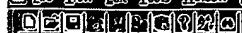
## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	14	("20020075178" "3648177" "4237461" "4709237" "5719580" "6211812").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/17 09:14
L2	0	("0291337").PN.	EPO	OR	OFF	2006/04/17 09:15
L3	2	"0291337".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/17 09:15
L4	0	"0291337".pn.	EPO; DERWENT	OR	ON	2006/04/17 09:15
L5	5	"291337".pn.	EPO; DERWENT	OR	ON	2006/04/17 09:29
L6	89978	radar	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/17 09:30
L7	168934	(pulse same (modulate or modulated or modulating or modulation or modulator))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/17 09:34
L8	1181	(time near4 dependent) same phase same (shift or shifted or shifting or shifter)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/17 09:30
L9	9673	6 and 7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/17 09:30
L10	32	8 and 9	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/17 09:30

## EAST Search History

L11	83879	range same (resolution or resolve or resolving)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/17 09:31
L12	29	10 and "11"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/17 09:31
L13	15	10 and 11	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/17 09:32
L14	15	(US-20060061505-\$ or US-20040150547-\$ or US-20030193430-\$).did. or (US-6879281-\$ or US-6870500-\$ or US-6624783-\$ or US-6587072-\$ or US-6427122-\$ or US-6225943-\$ or US-6222933-\$ or US-5013979-\$ or US-4370652-\$ or US-3594795-\$). did. or (US-3199106-\$).did. or (WO-2004005961-\$).did.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2006/04/17 09:32
L15	12	14 and @ad<="20030627"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/17 09:37
L16	1	(radar and (pulse same (modulate or modulated or modulating or modulation or modulator)) and ((time near4 dependent) same phase same (shift or shifted or shifting or shifter))).clm.	US-PGPUB	OR	ON	2006/04/17 09:35
L17	5750	((342/25R) or (342/A) or (342/25E) or (342/25F) or (342/118) or (342/128-137) or (342/159-162) or (342/192-196) or (342/200-204)). CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/17 09:37
L18	3156	17 and @ad<="20030627"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/17 09:38

Interference search



- Drafts
- Pending
- Active
  - L1: (14) ("20020075178"|"3648177"|"4237461"|"4709237"|"5719580"|"6211812").PN.
  - L2: (0) ("0291337").PN.
  - L3: (2) "0291337".pn.
  - L4: (0) "0291337".pn.
  - L5: (5) "291337".pn.
  - L6: (89978) radar
  - L7: (168934) (pulse same (modulate or modulated or modulating or modulation or modulator))
  - L8: (1181) (time near4 dependent) same phase same (shift or shifted or shifting or shifter)
  - L9: (9673) 6 and 7
  - L10: (32) 8 and 9
  - L11: (83879) range same (resolution or resolve or resolving)
  - L12: (29) 10 and "11"
  - L13: (15) 10 and 11
  - L14: (15) (US-20060061505-\$ or US-20040150547-\$ or US-20030193430-\$).did. or (US-6879281-\$ or U
  - L15: (12) 14 and @nd<="20030627"
  - L16: (1) (radar and (pulse same (modulate or modulated or modulating or modulation or modulator))...
  - L17: (3156) (342/25R) or (342/A) or (342/25E) or (342/25F) or (342/118) or (342/128-137) or (342-
  - L18: (3156) 17 and @nd<="20030627"
- Failed
- Saved
- Favorites
- Tagged (10)
- UDC
- Queue
- Trash

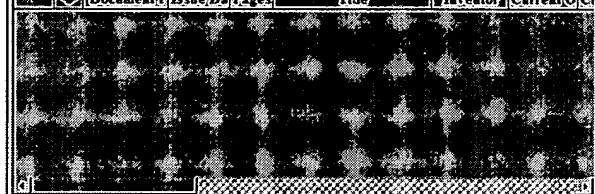
USPGPUB,USPAT,USOOR

Default operator OR

Export all items only

342/25R  
342/A  
342/25E  
342/25F  
342/118  
342/128-137  
342/159-162  
342/192-196  
342/200-204

Document Issues Page Title Investor Current



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Ready

Search Terms	Total	USPAT	USPGP	EPO	JPO	Deriv
1 342/118	379					
2 342/128	561					
3 342/129	161					
4 342/130	83					
5 342/131	142					
6 342/132	256					
7 342/133	163					
8 342/134	340					
9 342/135	276					

Has Details Image HTML

No text available to display

Has Details HTML

Interference search

Document: US 2006006 2006032 13 Title: High range resolution radar Kinghorn; A 342/25A 342/25A

	Search Terms	Total	USPAT	US-PGP	EPO	JPO	Deriv.
1	DEPENDENT	224209					
2	DEPENDENTS	546					
3	MODULATE	44911					
4	MODULATED	76306					
5	MODULATEDS	0					
6	MODULATES	28661					
7	MODULATING	47210					
8	MODULATING	0					
9	MODULATION	86236					

PGPUB-DOCUMENT-  
NUMBER: 20060061505  
PGPUB-FILING-TYPE:  
DOCUMENT-IDENTIFIER: US 20060061505 A1  
TITLE: High range resolution radar  
system  
PUBLICATION-DATE: March 23, 2006

**INVENTOR INFORMATION:**

# SEARCH NOTES FOR EAST, IEEE, INSPEC, IP.COM, AND PROQUEST

**SERIAL NUMBER**

10518240

## **EAST SEARCH**

EAST: search history attached

Search terms:

radar

(pulse same (modulate or modulated or modulating or modulation or modulator))

(time near/4 dependent) same phase same (shift or shifted or shifting or shifter)

changed at discrete time intervals, to the radar pulse at substantially the radar transmission frequency

comprises' applying a time-dependent phase shift, changed at discrete time intervals, to the received radar pulse at substantially the radar transmission frequency;

sampling the received signal at discrete time intervals which are an integral number of the time intervals of the time- dependent phase shift

## **IEEE SEARCH**

Search terms:

radar <and> (pulse <paragraph> (modulate <or> modulated <or> modulating <or> modulation <or> modulator)) <and> (time near/4 dependent) <paragraph> phase <paragraph> (shift <or> shifted <or> shifting <or> shifter)

**No results were found.**

radar <and> (pulse <paragraph> (modulate <or> modulated <or> modulating <or> modulation <or> modulator)) <and> (time near/4 dependent)

**No results were found.**

radar <and> (pulse <paragraph> (modulate <or> modulated <or> modulating <or> modulation <or> modulator)) <and> (distance <or> range) <and> resolution <and> time <and> dependent

1. **LARISSA, a large wavelength radar with interference-dependent spectral signal adaptation**  
Kuschel, H.  
Radar 92. International Conference  
12-13 Oct 1992 Page(s):316 - 319
2. **Analysis of the digital MTI filter with random PRI**  
Vergara-Dominguez, L.  
Radar and Signal Processing, IEE Proceedings F  
Volume 140, Issue 2, Apr 1993 Page(s):129 - 137
3. **A signal-dependent time-frequency representation: optimal kernel design**  
Baraniuk, R.G.; Jones, D.L.  
Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Signal Processing, IEEE Transactions on]  
Volume 41, Issue 4, Apr 1993 Page(s):1589 - 1602
4. **Time-frequency distribution of multichannel SAR-data for autofocusing of moving targets**  
Rieck, W.  
Radar 97 (Conf. Publ. No. 449)  
14-16 Oct 1997 Page(s):224 - 228
5. **Detection-tracking performance with combined waveforms**  
Rago, C.; Willett, P.; Bar-Shalom, Y.  
Aerospace and Electronic Systems, IEEE Transactions on  
Volume 34, Issue 2, Apr 1998 Page(s):612 - 624
6. **Frequency band selection of radars for buried object detection**  
Cherniakov, M.; Donskoi, L.  
Geoscience and Remote Sensing, IEEE Transactions on  
Volume 37, Issue 2, Mar 1999 Page(s):838 - 845
7. **Spatially distributed target detection in non-Gaussian clutter**  
Gerlach, K.  
Aerospace and Electronic Systems, IEEE Transactions on  
Volume 35, Issue 3, Jul 1999 Page(s):926 - 934
8. **Fully polarimetric bistatic radar scattering behavior of forested hills**  
McLaughlin, D.J.; Yuliang Wu; Stevens, W.G.; Xuehu Zhang; Sowa, M.J.; Weijers, B.  
Antennas and Propagation, IEEE Transactions on  
Volume 50, Issue 2, Feb 2002 Page(s):101 - 110

## INSPEC SEARCH

Search history:

No.	Database	Search term	Info added since	Results	
1	INZZ	radar	unrestricted	119677	<a href="#">show titles</a>
2	INZZ	pulse SAME (modulate OR modulated OR modulating OR modulation OR modulator)	unrestricted	33988	<a href="#">show titles</a>
3	INZZ	time NEAR dependent SAME phase SAME (shift OR shifted OR shifting OR shifter)	unrestricted	358	<a href="#">show titles</a>

4	INZZ	1 AND 2 AND 3	unrestricted	0
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**“Improved wideband time delay beam-steering”**, Conference Record of Thirty-Fifth Asilomar Conference on Signals, Systems and Computers 2001, vol.2, p. 1385-90 vol.2, Rabideau-D-J.

## IP.COM SEARCH

**Search** radar and (pulse same (modulate or modulated or modulating or modulation or modulator)) and **query:** (time and dependent) and phase and (shift or shifted or shifting or shifter) and resolution

Result # 1      Relevance: ★★★★★

Time frequency processor for radar imaging of moving targets (USH0001720)

1998-04-07              IPCOM000001698D              English (United States)

Conventional radar uses the Fourier transform to generate a radar target image. Constraints on the use of Fourier methods requiring point scatterers to remain in their range cells and requiring Doppler frequency shifts for point scatterers to be stationary are impractical ...

Result # 2      Relevance: ★★★★★

Approaches to Radar Signal Processing

1983-06-01              IPCOM000131616D              English (United States)

Separating desirable from undesirable signals requires a number of signal processing techniques'. For greater accuracy and resolution, most of today's systems use digital computations. The goal of modern radar signal processing is to improve the accuracy and dependability ...

Result # 3      Relevance: ★★★★★

Method for high resolution radar imagery and accurate dimensional measurements (USH0001181)

1993-05-04              IPCOM000001175D              English (United States)

This invention involves a method of processing radar returns to form two-dimensional images of targets such as ground vehicles, aircraft, ships, and so forth. Resolution in one dimension is provided by range resolution, and resolution in the other dimension is provided by ...

Result # 4      Relevance: ★★★★★

What Can Be Automated?: The Computer Science and Engineering Research Study (COSERS)

1980-01-01              IPCOM000128748D              English (United States)

It is truly difficult to capture with a single question the essence of research in a diverse and very active area of science and technology, but the query in the title comes very close. This questions was first posed by the late Professor George Forsythe of Stanford ...

## PROQUEST SEARCH

**Searching for (radar and (pulse w/para (modulate or modulated or modulating or modulation or modulator))) AND ((time and dependent) and phase) AND ((shift or shifted or shifting or shifter) and resolution) did not find any documents.**